5

10

A 3D CAMERA

ABSTRACT OF THE DISCLOSURE

A method and apparatus for providing inexpensive and accurate electrical synchronization between the individual cameras within a 3D or stereoscopic video camera is disclosed. The method and apparatus use a common clock pulse to both cameras and a frame reset pulse generated by one camera to provide a frame reset for the second camera. By using these pulses, it is possible to fully synchronize the two camera, a multiplexer and an RGB encoder to produce a totally in synchronization 3D or stereoscopic video signal without using expensive gen-lock techniques. In addition a method and apparatus for providing mechanical adjustment for the convergence of the horizontal axes of the cameras with a 3D or stereoscopic video camera is explained. It addition, the basic techniques used in the convergence is also shown for achieving an inexpensive and accurate method and apparatus for matching the tilt position of the individual cameras is shown.